

# PATENT COOPERATION TREATY

From the INTERNATIONAL BUREAU

**PCT**

## NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

To:

TUNNICLIFFE, Peter, Barry  
Chester Court  
Church Close  
Broadway  
Worcestershire, WR12 7AH  
ROYAUME-UNI

Date of mailing (day/month/year)

25 January 2001 (25.01.01)

Applicant's or agent's file reference

P.440.

### IMPORTANT NOTICE

International application No.

PCT/GB00/02665

International filing date (day/month/year)

12 July 2000 (12.07.00)

Priority date (day/month/year)

15 July 1999 (15.07.99)

Applicant

THE VICTORIA UNIVERSITY OF MANCHESTER et al

1. Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application to the following designated Offices on the date indicated above as the date of mailing of this Notice:  
AU,KP,KR,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AG,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,BZ,CA,CH,CN,CR,CU,CZ,DE,DK,DM,DZ,EA,EE,EP,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,JP,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MA,MD,MG,MK,MN,MW,MX,MZ,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU.  
The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

3. Enclosed with this Notice is a copy of the international application as published by the International Bureau on  
25 January 2001 (25.01.01) under No. WO 01/06245

### REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

### REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the national phase, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

J. Zahra

Facsimile No. (41-22) 740.14.35

Telephone No. (41-22) 338.83.38

**PCT**

WIPO PCT

**INTERNATIONAL PRELIMINARY EXAMINATION REPORT**



(PCT Article 36 and Rule 70)

Applicant's or agent's file reference P.440.		<b>FOR FURTHER ACTION</b> See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/GB00/02665	International filing date (day/month/year) 12/07/2000	Priority date (day/month/year) 15/07/1999	
International Patent Classification (IPC) or national classification and IPC G01N27/327			
Applicant THE VICTORIA UNIVERSITY OF MANCHESTER et al ] <i>IT LIMITED</i>			

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.  
  
☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).  
  
 These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the report
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☒ Certain defects in the international application
- VIII ☒ Certain observations on the international application

Date of submission of the demand  07/02/2001	Date of completion of this report  24.07.2001
Name and mailing address of the international preliminary examining authority:   European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized officer  Komenda, P  Telephone No. +49 89 2399 2777  

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02665

## I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

**Description, pages:**

1-15 as originally filed

**Claims, No.:**

1-31 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)):

# INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No. PCT/GB00/02665

*(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

## V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

### 1. Statement

Novelty (N)	Yes: Claims 1-31
	No: Claims
Inventive step (IS)	Yes: Claims 1-31
	No: Claims
Industrial applicability (IA)	Yes: Claims 1-31
	No: Claims

2. Citations and explanations  
**see separate sheet**

## VII. Certain defects in the international application

The following defects in the form or contents of the international application have been noted:  
**see separate sheet**

## VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made:  
**see separate sheet**

**Section V:**

Reference is made to the following documents:

D1 = EP-A-0 872 729

D2 = RUSSIAN PATENT ABSTRACTS, Section S-X, Week 9705, 14.02.1997,  
Derwent Publication Ltd., London GB; & RU 2059972 C1 (BIOCHEM INST)  
02.06.1993

**N:** Document D1 represents the nearest available prior art with respect to independent claim 1 and reveals a sensor device according to the first part of claim 1 (see claim 1 of D1). The difference between the device of D1 and that of claim 1 resides in the composition of the membrane: according to D1 said membrane comprises a polyvinylchloride-copolymer wherein the second monomer comprises hydrophilic groups; according to claim 1 the membrane is made of a composition containing an impermeable polymer (e.g. PVC) and polyvinylpyridine (PVP) (Article 33(2) PCT).

Corresponding distinguishing features are also present in method claim 16 and in use claims 28 to 31.

**IS:** The problem with conventional sensor devices comprising a diffusion membrane is their poor "anti-fouling" properties i.e. when exposed to complex sample compositions they are subject to irreversible fouling.

The present sensor (membrane) overcomes said problem by using the aforementioned specific polymer composition.

Document D2 describes a membrane made of a polymeric material with immobilised polyelectrolyte which is poly-4-vinylpyridine (i.e. the membrane is not comprised of a composition in the sense of claim 1). The immobilisation of the polyelectrolyte is conducted by placing the membrane in a solution of the polycation (of PVP) and incubating at room temperature. The thus obtained membrane is used as filter membrane in biotechnology. D2 does not mention any "anti-fouling" properties, let alone how such properties could be obtained.

**INTERNATIONAL PRELIMINARY  
EXAMINATION REPORT - SEPARATE SHEET**

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International application No. PCT/GB00/02665

The other documents of the international search report are less relevant. Consequently, since none of the available prior art describes a solution to the above problem, an inventive step is acknowledged for claims 1-31 (Article 33(3) PCT).

**IA:** Industrial applicability is also acknowledged (Article 33(4) PCT).

**Section VII:**

1. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art disclosed in the document D1 is not mentioned in the description, nor is this document identified therein. Moreover, a document reflecting the prior art described on page 3, 2nd paragraph, is not identified in the description.

**Section VIII:**

1. Claims 15, 22, and 27 are obscure since they refer to the description and should therefore be deleted (Rule 6.2 PCT).
2. The term "impermeable polymer" is unclear (cf. claim 1) and does not appear to have a well recognised meaning in the particular art. It should be mentioned here, that a claim must be clear in itself, without any need of referring to the description.
3. The feature of claim 11 does not constitute a limitation of the claimed sensor since it relates to the sample.
4. From the wording of claim 12 it is not apparent "where" the enzyme is present.
5. The expression "our composition" in claim 31 must be replaced by the intended compounds.
6. Brackets shall be used for reference signs only.

(19) World Intellectual Property Organization  
International Bureau



(43) International Publication Date  
25 January 2001 (25.01.2001)

PCT

(10) International Publication Number  
**WO 01/06245 A1**

- (51) International Patent Classification<sup>7</sup>: G01N 27/327
- (21) International Application Number: PCT/GB00/02665
- (22) International Filing Date: 12 July 2000 (12.07.2000)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
9916522.7 15 July 1999 (15.07.1999) GB
- (71) Applicant (*for all designated States except US*): THE VICTORIA UNIVERSITY OF MANCHESTER [GB/GB]; Oxford Road, Manchester M13 9PL (GB).
- (72) Inventors; and
- (75) Inventors/Applicants (*for US only*): VADGAMA, Pankaj, Madganlal [GB/GB]; 4 The Sidings, Drywood Avenue, Worsley, Manchester M28 4QA (GB). WARRINER, Keith, Stewart, Robert [GB/GB]; 183 Wellington Street, Long Eaton, Nottinghamshire NG10 4JQ (GB). LILLIE, Geoffrey [GB/GB]; 56 Richmond Grove, Longsight, Manchester M13 0DP (GB).
- (74) Agent: TUNNICLIFFE, Peter, Barry; Chester Court, Church Close, Broadway, Worcestershire, WR12 7AH (GB).
- (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW.
- (84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).
- Published:**
- *With international search report.*
  - *Before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments.*
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*

(54) Title: POLYMERIC COMPOSITIONS AND SENSOR DEVICES

(57) Abstract: Sensor devices for analysing fluid samples, using a detector separated from samples by a permeable membrane made by blending an impermeable polymer (especially a polyvinylchloride - "PVC") with a poly-vinylpyridine ("PVP"). Usually, the proportion of PVP is substantial - 20-80 % of the combined polymers by weight - and the membrane less than 50 µm thick. This mixed membrane may be 10 part of a multi-layer membrane, and can employ an enzyme to convert one analyte into another. Methods for their use are principally electrochemical, making measurements amperometrically with a metal electrode (especially platinum) and the membrane's permeability to analytes such as glucose is valuable for assessing biological media, e.g. blood. The polymer mixture has unusual resistance to permanent fouling by high molecular weight materials, so allowing these to be washed off when necessary and the membrane used repeatedly; this property can be given to other surfaces by coating with the polymer mixture.

WO 01/06245 A1

# INTERNATIONAL SEARCH REPORT

Inte Application No:  
PC1 00/02665

**A. CLASSIFICATION OF SUBJECT MATTER**  
G01N27/327

According to International Patent Classification (IPC) or to both national classification and IPC<sup>7</sup>

**B. FIELDS SEARCHED**

Minimum documentation searched (classification system followed by classification symbols)  
G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

**C. DOCUMENTS CONSIDERED TO BE RELEVANT**

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0872729 A1 (AVL MEDICAL INSTRUMENTS) 21 October 1998, the whole document.	1-31
Y	RUSSIAN PATENTS ABSTRACTS Section S-X, Week 9705, 14 February 1997 Derwent Publication Ltd., London, GB; Class S03, AN 97-050554/05 & RU 2059972 C1 (BIOCHEM INST) 02 June 1993, abstract.	1-31
Y	SOVIET PATENTS ABSTRACTS Section S-X, Week 8817, 08 June 1988	1-31

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

\* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search  
27 September 2000

Date of mailing of the international search report  
23. 11. 00

Name and mailing address of the International Searching Authority  
European Patent Office P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel(+31-70)340-2040, Tx 31 651 epo nl,  
Fax(+31-70)340-3018

Authorized officer  
NARDAI



## C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	<p>Derwent Publications Ltd., London, GB; Class S03, AN 88-118537/17 &amp; SU 1341566 A (AS LITH BIOCHEM INS) 02 December 1985, abstract.</p> <p>--</p> <p>FR 2656423 A1 (RHONE-POULENC CHIMIE) 28 June 1991, the whole document.</p> <p>----</p>	1-31

**ANHANG**

Zum internationalen Recherchenbericht über die internationale Patentanmeldung Nr.

**ANNEX**

To the International Search Report to the international Patent Application No.

**ANNEXE**

au rapport de recherche international relatif à la demande de brevet international n°

**PCT/GB 00/02665 SAE 291768**

In diesem Anhang sind die Mitglieder der Patentfamilien der im obengenannten internationalen Recherchenbericht angeführten Patentdokumente angegeben. Diese Angaben dienen nur zur Unterrichtung und erfolgen ohne Gewähr.

This annex lists the patent family members relating to the patent documents cited in the above-mentioned search report. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

La présente annexe indique les membres de la famille de brevets relatifs aux documents de brevets cités dans le rapport de recherche international visée ci-dessus. Les renseignements fournis sont donnés à titre indicatif et n'engagent pas la responsabilité de l' Office.

Im Recherchenbericht angeführte Patentdokumente Patent document cited in search report Document de brevet cité dans le rapport de recherche		Datum der Veröffentlichung Publication date Date de publication	Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets		Datum der Veröffentlichung Publication date Date de publication
EP A1	872729	21-10-1998	AT	A 664/97	15-04-1998
			AT	B 404992	26-04-1999
			JP	A2 11051894	26-02-1999
RU C1	2059972	10-05-1996		none	
SU A1	1341566	30-09-1987	LT	A3 2315	15-12-1993
FR A1	2656423	28-06-1991		none	

## PCT

## INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference <b>P. 440.</b>	<b>FOR FURTHER ACTION</b> see Notification of Transmittal of International Search Report (Form PCT/ISA/220) as well as, where applicable, item 5 below.	
International application No. <b>PCT/GB 00/ 02665</b>	International filing date (day/month/year) <b>12/07/2000</b>	(Earliest) Priority Date (day/month/year) <b>15/07/1999</b>
Applicant <b>THE VICTORIA UNIVERSITY OF MANCHESTER</b>		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 3 sheets.



It is also accompanied by a copy of each prior art document cited in this report.

## 1. Basis of the report

- a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.



the international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

- b. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international search was carried out on the basis of the sequence listing :



contained in the international application in written form.



filed together with the international application in computer readable form.



furnished subsequently to this Authority in written form.



furnished subsequently to this Authority in computer readable form.



the statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.



the statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished

2. ☐ Certain claims were found unsearchable (See Box I).

3. ☐ Unity of invention is lacking (see Box II).

4. With regard to the **title**,

the text is approved as submitted by the applicant.



the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

the text is approved as submitted by the applicant.



the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box III. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. The figure of the **drawings** to be published with the abstract is Figure No.

as suggested by the applicant.



because the applicant failed to suggest a figure.



because this figure better characterizes the invention.



None of the figures.

## INTERNATIONAL SEARCH REPORT

International Application No:  
PCT/GB 00/02665A. CLASSIFICATION OF SUBJECT MATTER  
G01N27/327According to International Patent Classification (IPC) or to both national classification and IPC<sup>7</sup>

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	EP 0872729 A1 (AVL MEDICAL INSTRUMENTS) 21 October 1998, the whole document. --	1-31
Y	RUSSIAN PATENTS ABSTRACTS Section S-X, Week 9705, 14 February 1997 Derwent Publication Ltd., London, GB; Class S03, AN 97-050554/05 & RU 2059972 C1 (BIOCHEM INST) 02 June 1993, abstract. --	1-31
Y	SOVIET PATENTS ABSTRACTS Section S-X, Week 8817, 08 June 1988	1-31

☒ Further documents are listed in the continuation of box C.☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- "A" document defining the general state of the art which is not considered to be of particular relevance
- "E" earlier document but published on or after the international filing date
- "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- "O" document referring to an oral disclosure, use, exhibition or other means
- "P" document published prior to the international filing date but later than the priority date claimed

- "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- "&" document member of the same patent family

Date of the actual completion of the international search

27 September 2000

Date of mailing of the international search report

23. 11. 00

Name and mailing address of the International Searching Authority  
European Patent Office P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel(+31-70)340-2040, Tx 31 651 epo nl,  
Fax(+31-70)340-3016

Authorized officer

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C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	Derwent Publications Ltd., London, GB; Class S03, AN 88-118537/17 & SU 1341566 A (AS LITH BIOCHEM INS) 02 December 1985, abstract. --	1-31
	FR 2656423 A1 (RHONE-POULENC CHIMIE) 28 June 1991, the whole document. ----	

## ANHANG

Zum internationalen Recherchenbericht über die internationale Patentanmeldung Nr.

## ANNEX

To the International Search  
Report to the international Patent  
Application No.

## ANNEXE

Au rapport de recherche international relatif à la demande de brevet international n°

PCT/GB 00/02665 SAE 291768

In diesem Anhang sind die Mitglieder der Patentfamilien der im obengenannten internationalen Recherchenbericht angeführten Patentdokumente angegeben. Diese Angaben dienen nur zur Unterrichtung und erfolgen ohne Gewähr.

This annex lists the patent family members relating to the patent documents cited in the above-mentioned search report. The European Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

La présente annexe indique les membres de la famille de brevets relatifs aux documents de brevets cités dans le rapport de recherche international visée ci-dessus. Les renseignements fournis sont donnés à titre indicatif et n'engagent pas la responsabilité de l'Office.

Im Recherchenbericht angeführte Patentdokumente Patent document cited in search report Document de brevet cité dans le rapport de recherche			Datum der Veröffentlichung Publication date Date de publication		Mitglied(er) der Patentfamilie Patent family member(s) Membre(s) de la famille de brevets		Datum der Veröffentlichung Publication date Date de publication	
EP A1	872729		21-10-1998		AT A	664/97	15-04-1998	
					AT B	404992		
					JP A2	11051894		
RU C1	2059972		10-05-1996			none		
SU A1	1341566		30-09-1987		LT A3	2315	15-12-1993	
FR A1	2656423		28-06-1991			none		

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

KIDDLE, Simon, J.  
Mewburn Ellis  
York House  
23 Kingsway  
London WC2B 6HP  
ROYAUME-UNI

Date of mailing (day/month/year) 23 March 2001 (23.03.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference P.440.	
International application No. PCT/GB00/02665	International filing date (day/month/year) 12 July 2000 (12.07.00)

## 1. The following indications appeared on record concerning:

☐ the applicant    ☐ the inventor    ☒ the agent    ☐ the common representative

Name and Address TUNNICLIFFE, Peter, Barry Chester Court Church Close Broadway Worcestershire, WR12 7AH United Kingdom	State of Nationality	State of Residence
	Telephone No. 01386 858127	
	Facsimile No. 01386 858127	
	Teleprinter No.	

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☒ the person    ☐ the name    ☒ the address    ☐ the nationality    ☐ the residence

Name and Address KIDDLE, Simon, J. Mewburn Ellis York House 23 Kingsway London WC2B 6HP United Kingdom	State of Nationality	State of Residence
	Telephone No. 0171 240 4405	
	Facsimile No. 0171 240 9339	
	Teleprinter No.	

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer  Mougamadou ABIDINE
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38

## PATENT COOPERATION TREATY

PCT

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

From the INTERNATIONAL BUREAU

To:

KIDDLE, Simon, J.  
Mewburn Ellis  
York House  
23 Kingsway  
London WC2B 6HP  
ROYAUME-UNI

Date of mailing (day/month/year) 23 March 2001 (23.03.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference P.440.	
International application No. PCT/GB00/02665	International filing date (day/month/year) 12 July 2000 (12.07.00)

1. The following indications appeared on record concerning:		
<input checked="" type="checkbox"/> the applicant	<input type="checkbox"/> the inventor	<input type="checkbox"/> the agent <input type="checkbox"/> the common representative
Name and Address THE VICTORIA UNIVERSITY OF MANCHESTER Oxford Road Manchester M13 9PL United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:		
<input type="checkbox"/> the person	<input checked="" type="checkbox"/> the name	<input checked="" type="checkbox"/> the address <input type="checkbox"/> the nationality <input type="checkbox"/> the residence
Name and Address INTERNATIONAL INTERSTITIAL TECHNOLOGIES LIMITED 21 Southampton Row London WC1B 5HS United Kingdom	State of Nationality GB	State of Residence GB
	Telephone No.	
	Facsimile No.	
	Teleprinter No.	
3. Further observations, if necessary:		
4. A copy of this notification has been sent to:		
<input checked="" type="checkbox"/> the receiving Office	<input checked="" type="checkbox"/> the designated Offices concerned	
<input type="checkbox"/> the International Searching Authority	<input type="checkbox"/> the elected Offices concerned	
<input type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:	

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland	Authorized officer Mougamadou ABIDINE
Facsimile No.: (41-22) 740.14.35	Telephone No.: (41-22) 338.83.38



## PATENT COOPERATION TREATY

PCT

## NOTIFICATION OF ELECTION

(PCT Rule 61.2)

From the INTERNATIONAL BUREAU

To:

Commissioner  
 US Department of Commerce  
 United States Patent and Trademark  
 Office, PCT  
 2011 South Clark Place Room  
 CP2/5C24  
 Arlington, VA 22202  
 ETATS-UNIS D'AMERIQUE  
 in its capacity as elected Office

Date of mailing (day/month/year) 06 April 2001 (06.04.01)	
International application No. PCT/GB00/02665	Applicant's or agent's file reference P.440.
International filing date (day/month/year) 12 July 2000 (12.07.00)	Priority date (day/month/year) 15 July 1999 (15.07.99)
Applicant VADGAMA, Pankaj, Madganlal et al	

1. The designated Office is hereby notified of its election made:

☒ in the demand filed with the International Preliminary Examining Authority on:  
 07 February 2001 (07.02.01)

☐ in a notice effecting later election filed with the International Bureau on:  
 \_\_\_\_\_

2. The election ☒ was  
☐ was not

made before the expiration of 19 months from the priority date or, where Rule 32 applies, within the time limit under Rule 32.2(b).

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland  Facsimile No.: (41-22) 740.14.35	Authorized officer  Juan Cruz  Telephone No.: (41-22) 338.83.38
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## PATENT COOPERATION TREATY

PCT

From the INTERNATIONAL BUREAU

NOTIFICATION OF THE RECORDING  
OF A CHANGE(PCT Rule 92bis.1 and  
Administrative Instructions, Section 422)

To:

KIDDLE, Simon, J.  
Mewburn Ellis  
York House  
23 Kingsway  
London WC2B 6HP  
ROYAUME-UNI

Date of mailing (day/month/year) 06 juillet 2001 (06.07.01)	<b>IMPORTANT NOTIFICATION</b>
Applicant's or agent's file reference P.440.	
International application No. PCT/GB00/02665	International filing date (day/month/year) 12 juillet 2000 (12.07.00)

## 1. The following indications appeared on record concerning:

☒ the applicant
 ☐ the inventor
 ☐ the agent
 ☐ the common representative

## Name and Address

INTERNATIONAL INTERSTITIAL  
TECHNOLOGIES LIMITED  
21 Southampton Row  
London WC1B 5HS  
United Kingdom

## State of Nationality

GB

## State of Residence

GB

Telephone No.

Facsimile No.

Teleprinter No.

## 2. The International Bureau hereby notifies the applicant that the following change has been recorded concerning:

☐ the person
 ☒ the name
 ☐ the address
 ☐ the nationality
 ☐ the residence

## Name and Address

IIT LIMITED  
21 Southampton Row  
London WC1B 5HS  
United Kingdom

## State of Nationality

GB

## State of Residence

GB

Telephone No.

Facsimile No.

Teleprinter No.

## 3. Further observations, if necessary:

## 4. A copy of this notification has been sent to:

<input checked="" type="checkbox"/> the receiving Office	<input type="checkbox"/> the designated Offices concerned
<input type="checkbox"/> the International Searching Authority	<input checked="" type="checkbox"/> the elected Offices concerned
<input checked="" type="checkbox"/> the International Preliminary Examining Authority	<input type="checkbox"/> other:

The International Bureau of WIPO  
34, chemin des Colombettes  
1211 Geneva 20, Switzerland

Authorized officer

Dominique DELMAS

Facsimile No.: (41-22) 740.14.35

Telephone No.: (41-22) 338.83.38